REMARKS

By this amendment, claims 1, 2, 6, 8, 10 and 14 are amended, claims 5, 7, and 12 are canceled, and new claims 16-19 are added to place this application in condition for allowance. Currently, claims 1-4, 6, and 8-11 and 13-19 are before the Examiner for consideration on their merits.

In review, claim 1 is revised to define a pin with new claim 16 added to claim a box. Claims 6, 8, 10 and 14 are revised to be consistent with the changes made to claim 1. New claims 17-19 parallel claims 6, 8, and 14 but are in the context of the box. Claim 2 is also revised to include the limitations of claim 5 therein. In light of the revision to claim 2, claim 12 is redundant and has been canceled.

In light of the changes to claims 1 and 2 and the addition of claim 16, Applicants respectfully traverse the rejections of the claims based on Yamamoto and Goto. The traversals are set out below under the heading of the rejected independent claims.

CLAIM 1 (PIN) AND NEW CLAIM 16 (BOX)

In the rejection, claims 1 and its dependent claims stand rejected under 35 U.S.C. § 102(b) based on Yamamoto. In response to the last amendment, the Examiner has taken the position that the resin layer 6 is considered to be the claimed upper layer and the rust preventive oil layer 12 is the claimed lower layer. While not specifically identifying the reasoning for this allegation, it appears that the Examiner is considering the pin and box together when identifying the resin layer 6 as the upper layer.

Quite clearly when looking at Figure 10, the upper layer on the pin 2 is the rust preventive film 12, and this arrangement is opposite of the claim language specifying that the upper layer is in solid form.

In the rejection, the Examiner states "The claimed upper layer (6) is between the lower layer (12) and the pin or box." This only makes sense when one looks at Figure 10 and considers the resin film 6 on the box as an upper layer and the rust preventive film 12 contained on the pin as a lower layer.

However, this approach does not produce the arrangement of claims 1 and 16, as amended. Referring to claim 1, this claim now defines a pin having a contact surface, with the lower lubricant layer on the contact surface and the upper lubricant layer appearing as the outer surface for the contact surface of the pin. Claim 16 defines the same arrangement only in the context of a box.

Yamamoto does not teach or suggest the arrangement of either of claims 1 or 16. While Yamamoto includes a rust preventive film, which would read on the liquid lower lubricant layer, either in the embodiment of Figure 9 or Figure 10, the liquid film is on the outside of the pin or box. This creates the very problem that Applicants are trying to avoid. As pointed out on page 4 of the specification, prior art techniques that employed liquid films or greases were problematic in the film or grease's attraction to dirt and the like. This attraction would result in pick up of unwanted materials on the pin or box, and the presence of these unwanted materials would compromise the threaded joint once the pin and box were mated.

The present invention solves this problem without compromising the integrity of the joint. That is, the pin or box is given a lubricating coating that includes a liquid lubricant layer and a solid lubricant layer, with the solid layer appearing as the outer surface of the covered

contact surface. This arrangement retains the beneficial properties of the liquid layer, while avoiding the pickup of unwanted material as described above. This problem and solution are nowhere to be found within the teachings of Yamamoto. Again, the arrangements of Yamamoto in Figures 9 and 10 both show the rust preventive film as the outer surface of the box or pin, and this is not the same as the arrangement now set forth in claims 1 and 16.

Since Yamamoto does not teach the arrangement of claims 1 and 16, this patent cannot establish a *prima facie* case of anticipation. The Examiner is left with either formulating a rejection under 35 U.S.C. § 103(a) or passing claims 1 and 16 onto allowance. It is submitted that there is no legitimate reason why one of skill in the art would modify Yamamoto and arrive at the invention unless hindsight was used as a basis to take such a step.

As mentioned above, Yamamoto is silent on the problem faced by the inventors, and there is no justification for an allegation that the invention is obvious based on the teachings of this prior art patent. For the Examiner to somehow conclude that one of skill in the art would find it obvious to alter the arrangement of the films depicted in Figures 9 and 10 of Yamamoto would be the use of hindsight. There is no reason for such a modification in the four corners of Yamamoto, and the Examiner would be concluding obviousness with a basis to do so.

Lacking a basis to allege anticipation or obviousness, the Examiner has no choice but to withdraw the rejection against claim 1 and pass claims 1 and 16 and their respective dependent claims onto issuance.

CLAIM 2

Yamamoto

Claim 2 and its dependent claims remains rejected under 35 U.S.C. § 102(b) based on Yamamoto and 35 U.S.C. § 102(e) based on Goto. In maintaining the rejections, the Examiner cites Yamamoto as teaching a film of a metal salt of a carboxylic acid and a lubricant to be the claimed lubricating oil. The Examiner then relies on the disclosure in col. 18, lines 26-31 that a wax could be added to the film, such that the claimed oil and wax combination is taught.

Claim 2 has been amended to include the limitations of claim 5 therein. In rejecting claim 5, the Examiner has taken the position that the manner of making the lubricating coating is not germane to the patentability of the coating. Applicants respectfully disagree with the stance, and submit that the language of claim 5, now found in claim 2, does limit the coating as recited and claim 2 is not taught or suggested in Yamamoto.

First, the Examiner is reminded of the focus of the invention and overcoming the problems with prior art films that were greasy. The embodiment of claim 2 is also directed to solving this problem. In this regard, the Examiner's attention is directed to page 16, lines 2-9, wherein the decreased greasiness is also attributed to the second embodiment of the invention.

Moreover, pages 16-18 of the specification clearly teach that the coating is a function of the manner in which it is made. By heating the mixture that has been heated as now recited in claim 2, a solid or semi-solid coating is obtained that has decreased greasiness and improved dry touch even when having a high amount of the lubricating oil.

The mere fact that Yamamoto teaches that a wax may be used does not mean that the mixture defined in claim 2 is present in the wax-containing coating of Yamamoto. Yamamoto does not teach anything about heating a mixture of the lubricating oil and wax as now required by claim 2. Therefore, one of skill in the art can only conclude that the coating of Yamamoto would comprise the lubricating oil in its liquid and greasy state with a wax dispersed therein, and

would not be the coating of claim 2, wherein the mixture is subjected to heating. Therefore, there is no basis or justification for concluding that a mere mix of the wax and lubricating oil of Yamamoto would produce the same coating that is defined in claim 2.

Again, Applicants' intent for claim 2 is to improve the dry touch of the contact surface of the pin or box, and this is attained by the mixture recited in claim 2. Lacking the limitations of claim 2, Yamamoto cannot anticipate this claim. Thus, the rejection of claim 2 and its dependent claims under 35 U.S.C. § 102(b) must be withdrawn.

As with claim 1, it is also Applicants' contention that Yamamoto cannot support a rejection based on 35 U.S.C. § 103(a). There is no recognition of the problem of greasiness in Yamamoto and there is no basis to conclude that the artisan could somehow arrive at the invention given the teachings of Yamamoto. Any such contention could only be the hindsight reconstruction of the prior art in light of Applicants' disclosure, and such a rejection could not be sustained on appeal.

If the Examiner were to make an obviousness rejection, the Examiner would have to conclude that it would be obvious to heat the mix of oil and wax so as to form a lubricating coating on the pin or box of a threaded joint. However, where is the basis to draw this conclusion? There is none in Yamamoto and such a rejection could not be legitimately made.

Therefore, the rejection of claim 2 as applied to Yamamoto should be withdrawn.

Goto

In rejecting claim 2 under 35 U.S.C. § 102(e) based on Goto, the Examiner cites col. 6, line 6 to col. 8, line 40 to contend that Goto uses a lubricating oil as a film for a threaded joint, and cites col. 9, lines 15-60 to contend that a wax could be combined with the oil. The rejection based on Goto suffers from the same problems as the rejection of claim 2 based on Yamamoto.

That is, Goto merely teaches that a wax can be included as part of the lubricating coating. Goto makes no mention of the problems of greasiness when using lubricating oils. Further, there is no suggestion of a mixture that is formed by heating the mixture of wax and lubricating oil. At best, Goto teaches that the wax and lubricating oil may be present together, but this mixture would still not meet the limitations of claim 2, i.e., a semi-solid or solid lubricating coating consisting essentially of the mixture of wax and lubricating oil, wherein the mixture is heated to at least the temperature at which the wax is liquefied. .

As pointed out above, the inventive coating of claim 2 is one that does not have the greasiness nor the attendant pickup problems that are found in the prior art coatings employing liquid components. The mixture of wax and lubricating oil as a coating in Goto is not the same as that presently claimed and Goto cannot anticipate claim 2 in its amended form.

The same arguments set out above apply here regarding Goto and a rejection under 35 U.S.C. § 103(a). That is, Goto has no recognition of the problem faced by the inventors and clearly no reason to arrive at the solution of the invention. Thus, there is no basis to make a rejection of claim 2 under 35 U.S.C. § 103(a) using the teachings of Goto.

SUMMARY

By the revisions to claim 1, the rejection relying on anticipation of claim 1 is overcome. Further, there is no basis to further reject claim 1 under 35 U.S.C. § 103(a), and this claim 1, its dependent claims, and added claims 16-19 are in condition for allowance.

Similarly, neither Goto nor Yamamoto anticipate claim 2 in its amended form. In addition, there is no basis to use these patents to reject claim 2 under 35 U.S.C. § 103(a). Thus, claim 2 and its dependent claims should be passed onto issuance.

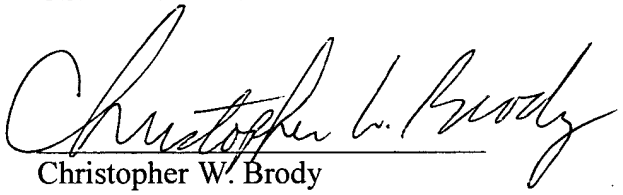
Accordingly, the Examiner is respectfully requested to examine this application in light of this amendment, and pass all pending claims onto issuance.

If the Examiner believes that an interview would be helpful in expediting the allowance of this application, the Examiner is requested to telephone the undersigned at 202-835-1753.

The above constitutes a complete response to all issues raised in the Office Action dated August 12, 2006.

Applicants respectfully petition for a two month extension of time. A check in the amount of $450.00 is submitted herewith. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 50-1088.

Respectfully submitted,
CLARK & BRODY



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Date: January 16, 2007